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=> fil reg; d que

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L32          392 SEA FILE=REGISTRY ABB=ON  PLU=ON  ADLMGYIPLV|LLALLSCLTV|Q
                 LRRHIDLLV|LLCPAGHAV|KLVALGINAV|SLMAFTAAV|LLFNILGGWV|ILDSF
                 DPLV|DLMGYIPLV/SQSP
L33           21 SEA FILE=REGISTRY ABB=ON  PLU=ON  L32 AND SQL=<25

=> fil ca,caplus

FILE 'CA' ENTERED AT 15:58:30 ON 14 JAN 1998
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=> s l33

L34          39 L33

=> dup rem l34

PROCESSING COMPLETED FOR L34
L35          20 DUP REM L34 (19 DUPLICATES REMOVED)

=> d 1-20 .bevstr; sel hit l35 1-20 rn


L35  ANSWER 1 OF 20  CA  COPYRIGHT 1998 ACS              DUPLICATE 1
AN   128:12561  CA
TI   Methods for selecting and producing T cell peptide epitopes and
     vaccines incorporating said selected epitopes
                        Searcher  :  Shears   308-4994
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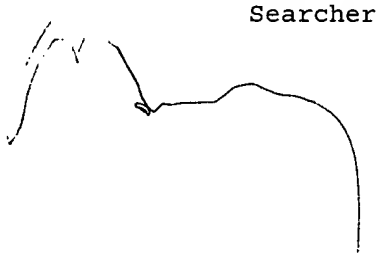

IN Van, Der Burg Sjoerd Henricus; Kast, Wybe Martin; Toes, Reinaldus Everardus Maria; Offringa, Rienk; Melief, Cornelius Johannes Maria

PA Rijksuniversiteit Te Leiden, Neth.; Seed Capital Investments (Sci) B.V.; Van Der Burg, Sjoerd Henricus; Kast, Wybe Martin; Toes, Reinaldus Everardus Maria; Offringa, Rienk; Melief, Cornelius Johannes Maria

SO PCT Int. Appl., 108 pp.
CODEN: PIXXD2

PI WO 9741440 A1 971106

DS W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG

AI WO 97-NL229 970428

PRAI EP 96-201145 960426
EP 96-203670 961223

DT Patent

LA English

AB The present invention relates to vaccines and methods for providing vaccines which elicit T cell response by peptide T cell epitopes when administered to a mammal, in particular a human. These vaccines find their application in many fields ranging from cancer treatments to treatments of prophylaxis of infectious diseases such as AIDS. The present invention provides novel methods for selecting the peptide sequences from an intact antigen which will lead to a proper (T cell) immune response upon administration in a suitable vehicle. The epitopes discussed were E6 and E7 proteins of human papilloma virus 16 and 18, gag and pol and env proteins of HIV, MAGE-2 and tyrosinase and Melan-A/MART-1 of human melanoma antigen, p21Ras and p53 human oncoproteins, human carcinoembryonic antigen, human epithelial cell adhesion mol., human CD19, CD20, CD44, Ig. heavy and light chain variable regions, etc.. Also discussed was vaccination with recombinant adenoviruses harboring several defined T cell epitopes in string-of-bead constructs.

IT **160215-51-0 160926-86-3 160926-89-6**
160926-90-9
RL: ANT (Analyte); BPR (Biological process); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); PROC (Process); USES (Uses)
(methods for selecting and producing T cell peptide epitopes and vaccines incorporating said selected epitopes)

L35 ANSWER 2 OF 20 CAPLUS COPYRIGHT 1998 ACS

AN 1997:725337 CAPLUS

TI Immunological significance of cytotoxic T lymphocyte epitope variants in patients chronically infected by the hepatitis C virus

AU Chang, Kyong-Mi; Rehermann, Barbara; Mchutchison, John G.; Pasquinelli, Claudio; Southwood, Scott; Sette, Alessandro; Chisari, Francis V.

CS Department of Molecular & Experimental Medicine, The Scripps Research Institute, La Jolla, CA, CA 92037, USA

SO J. Clin. Invest. (1997), 100(9), 2376-2385
CODEN: JCINAO; ISSN: 0021-9738

PB Rockefeller University Press

DT Journal

LA English

AB This study was performed to test the hypothesis that cytotoxic T lymphocyte (CTL) selection of hepatitis C virus (HCV) escape variants plays a role in HCV persistence. The peripheral blood CTL responsiveness of patients with well-established chronic hepatitis C to a panel of 10 prototype HCV peptides (genotype 1a) was compared with the corresponding sequences encoded by the infecting viruses in each patient. Variant viral peptide sequences were threefold more frequent in the presence of a CTL response than in its absence, and CTL responses were detected nearly twice as often in assocn. with variant rather than with prototype viral peptide sequences. Furthermore, over half of the patients were infected with potential CTL escape variants that contained nonimmunogenic and noncross-reactive variant peptides many of which displayed reduced HLA-binding affinity. Surprisingly, follow up anal. over a period of up to 46 mo revealed that, in contrast to the relatively high frequency of escape variants initially obsd., the subsequent emergence rate of CTL escape variants was very low. Interestingly, the one escape variant that was detected proved to be a CTL antagonist. Collectively, these observations suggest that CTL selection of epitope variants may have occurred in these patients before their entrance into the study and that it may have played a role in HCV persistence. The low apparent rate of ongoing CTL selection in chronically infected patients, however, suggests that if CTL escape occurs during HCV infection it is probably an early event.

IT **160213-98-9P 160926-86-3P 160926-88-5P 160926-89-6P 160926-90-9P 171105-25-2P**
RL: BPR (Biological process); PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); PROC (Process)
(cytotoxic T lymphocytes of humans with chronic hepatitis C virus infection reactivity with genotype 1a epitope)

L35 ANSWER 3 OF 20 CA COPYRIGHT 1998 ACS DUPLICATE 2

AN 125:219449 CA

TI Differential cytotoxic T-lymphocyte responsiveness to the hepatitis B and C viruses in chronically infected patients

AU Rehermann, Barbara; Chang, Kyong-Mi; McHutchison, John; Kokka, Robert; Houghton, Michael; Rice, Charles M.; Chisari, Francis V.

CS Department Molecular Experimental Medicine, Scripps Research Institute, La Jolla, CA, 92037, USA
SO J. Virol. (1996), 70(10), 7092-7102
CODEN: JOVIAM; ISSN: 0022-538X
DT Journal
LA English
AB Cytotoxic T lymphocytes (CTL) are thought to control hepatitis B virus (HBV) infection, since they are readily detectable in patients who clear the virus whereas they are hard to detect during chronic HBV infection. In chronic hepatitis C virus (HCV) infection, however, the virus persists in the face of a CTL response. Indeed, most infected patients respond to one or more HCV-1 (genotype 1a)-derived CTL epitopes in the core, NS3, and NS4 proteins, and the CTL response is equally strong in patients infected by different HCV genotypes, suggesting broad cross-reactivity. To examine the effect of the HCV-specific CTL response in patients with chronic hepatitis C on viral load and disease activity, we quantitated the strength of the multispecific CTL response against 10 independent epitopes within the HCV polyprotein. We could not detect a linear correlation between the CTL response and viral load or disease activity in these patients. However, the CTL response was stronger in the subgroup of patients whose HCV RNA was below the detection threshold of the HCV branched-chain DNA assay than in branched-chain-DNA-pos. patients. These results suggest that the HCV-specific CTL response may be able to control viral load to some extent in chronically infected patients, and they indicate that prospective studies in acutely infected patients who successfully clear HCV should be performed to more precisely define the relationship between CTL responsiveness, viral clearance, and disease severity in this infection.
IT **160213-98-9 160926-86-3 160926-88-5 160926-89-6 160926-90-9 171105-25-2**
RL: BPR (Biological process); BIOL (Biological study); PROC (Process)
(differential cytotoxic T-lymphocyte responsiveness to the hepatitis B and C viruses in chronically infected humans)

L35 ANSWER 4 OF 20 CA COPYRIGHT 1998 ACS DUPLICATE 3
AN 125:140053 CA
TI Identification of a murine CD4+ T-lymphocyte response site in hepatitis C virus core protein
AU Chen, Ziping; Berkower, Ira; Ching, Wei-Mei; Wang, R. Yuan-Hu; Alter, Harvey J.; Shih, J. Wai-Kuo
CS Warren G. Magnuson Clinical Cent., Natl. Inst. Health, Bethesda, MD, 20892-1184, USA
SO Mol. Immunol. (1996), 33(7/8), 703-709
CODEN: MOIMD5; ISSN: 0161-5890
DT Journal
LA English

AB The T cell response to a recombinant HCV truncated core protein (cp1-10) was measured in a proliferation assay. Based on a 10-fold greater response to this truncated core protein than to its shorter form (cp1-8), a predominant epitope was mapped to the carboxyl quarter of this sequence. This epitope was further mapped to a synthetic peptide corresponding to amino acids 121-140 of the core protein. The peptide was antigenic for T cells of all three H-2 types tested, H-2 r, b and d, and the proliferating T cells were CD4+. Besides inducing specific proliferation in vitro, peptide aa121-140 can prime helper T cells in vivo. When boosted with core protein, mice primed with peptide produced 64-fold higher antibody titer than without priming in 1 wk. The identification of a broadly immunogenic T cell helper epitope on core protein may be important for vaccine design against HCV.

IT **166673-16-1**
RL: BPR (Biological process); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(identification of a murine CD4+ T-lymphocyte epitope in hepatitis C virus core protein that may be important for vaccine design)

L35 ANSWER 5 OF 20 CA COPYRIGHT 1998 ACS DUPLICATE 4
AN 125:31624 CA
TI Identification of A2-restricted hepatitis C virus-specific cytotoxic T lymphocyte epitopes from conserved regions of the viral genome
AU Wentworth, Peggy A.; Sette, Alessandro; Celis, Esteban; Sidney, John; Southwood, Scott; Crimi, Claire; Stitely, Suzette; Keogh, Elissa; Wong, Nanette C.; et al.
CS Cytel Corp., San Diego, CA, 92121, USA
SO Int. Immunol. (1996), 8(5), 651-659
CODEN: INIMEN; ISSN: 0953-8178
DT Journal
LA English
AB We have focused on conserved regions of the hepatitis C virus (HCV) genome to identify viral peptides that contain HLA class I binding motifs and bind with high affinity to the corresponding purified HLA mols. Accordingly, we have identified 31 candidate epitopes in the HCV that have the potential to be recognized by either HLA-A1-, A2.1-, A3-, A11- or A24-restricted cytotoxic T lymphocytes (CTL). Twelve conserved peptides that bind HLA-A2.1 with high or intermediate affinity were tested for immunogenicity in vitro in human primary CTL cultures and in vivo by direct immunization of HLA-A2.1/Kb transgenic mice. Six HLA-A2.1-restricted CTL epitopes were immunogenic in both systems. At least three of these peptide epitopes were endogenously processed and presented for CTL recognition. Overall, these data illustrate the value of this approach for the development of virus-specific, peptide-based vaccines.
IT **160214-03-9**

RL: BPR (Biological process); PRP (Properties); BIOL (Biological study); PROC (Process)
(identification of HLA-A-restricted hepatitis C virus-specific cytotoxic T lymphocyte epitopes and their possible use in vaccines)

L35 ANSWER 6 OF 20 CA COPYRIGHT 1998 ACS DUPLICATE 5
AN 124:114847 CA
TI Differences and similarities in the A2.1-restricted cytotoxic T cell repertoire in humans and human leukocyte antigen-transgenic mice
AU Wentworth, Peggy A.; Vitiello, Antonella; Sidney, John; Keogh, Elissa; Chesnut, Robert W.; Grey, Howard; Sette, Alessandro
CS Cytel Corp., San Diego, CA, USA
SO Eur. J. Immunol. (1996), 26(1), 97-101
CODEN: EJIMAF; ISSN: 0014-2980
DT Journal
LA English
AB HLA-A2.1-binding peptides were screened for immunogenicity with human peripheral blood mononuclear cells in cytotoxic T lymphocyte (CTL) induction expts. in vitro and with splenocytes from HLA-A2.1/Kb transgenic mice following immunization in vivo. These data were compiled and analyzed to det. the level of overlap between the A2.1-restricted CTL repertoire of A2.1/Kb-transgenic mice and A2.1+ humans. In both humans and mice, a major histocompatibility complex affinity threshold of approx. 500 nM appears to det. the capacity of a peptide to elicit a CTL response. Good concordance between the human data in vitro and mouse data in vivo was obsd. with 85% of the high-binding peptides, 58% of the intermediate binders, and 83% of the low/neg. binders. Although some peptides immunogenic for mouse CTL but not for humans (and vice versa) could be identified, the data as a whole suggest an extensive overlap between T cell receptor repertoires of mouse and human CTL and support the use of HLA-transgenic mice for the identification of potential human CTL epitopes.
IT **160213-98-9 160214-03-9 160215-51-0**
RL: BAC (Biological activity or effector, except adverse); BIOL (Biological study)
(differences and similarities in HLA-A2.1-restricted cytotoxic T cell repertoire in humans and HLA-transgenic mice)

L35 ANSWER 7 OF 20 CA COPYRIGHT 1998 ACS DUPLICATE 6
AN 124:172865 CA
TI Use of intrinsic and extrinsic helper epitopes for in vivo induction of anti-hepatitis C virus cytotoxic T lymphocytes (CTL) with CTL epitope peptide vaccines
AU Shirai, Mutsunori; Chen, Ming; Arichi, Tatsumi; Masaki, Tsutomu; Nishioka, Mikio; Newman, Mark; Nakazawa, Teruko; Feinstone, Stephen M.; Berzofsky, Jay A.
CS School Medicine, Yamaguchi University, Yamaguchi, Japan

SO J. Infect. Dis. (1996), 173(1), 24-31
CODEN: JIDIAQ; ISSN: 0022-1899
DT Journal
LA English
AB The induction of virus-specific cytotoxic T lymphocytes (CTL) is an important part of vaccine strategy. CTL induction in vivo by two hepatitis C virus (HCV) peptides contg. CTL epitopes, one from the NS5 region (P17) and one from the core (C7), was compared. P17 required covalent attachment of a helper peptide (PCLUS3 contg. a cluster of epitopes from the human immunodeficiency virus envelope protein), whereas C7 did not. However, the minimal decapeptide of C7, C7A10, alone did not induce CTL. The helper cells induced by PCLUS3-17 or by C7 were shown to be CD4+ and to produce interleukin-2 (IL-2). Thus, help can be supplied by a natural helper epitope intrinsic to the CTL peptide, as in C7, or by attaching a helper epitope from another protein, as in the case of P17. The cluster peptides may be useful promiscuous helper peptides for a variety of CTL epitopes from diverse pathogens.
IT **156649-16-0**
RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(as core protein epitope in hepatitis C virus vaccine)

L35 ANSWER 8 OF 20 CA COPYRIGHT 1998 ACS DUPLICATE 7
AN 124:111715 CA
TI Hepatitis C virus core peptides for stimulation of cytotoxic T lymphocytes and diagnosis of HCV exposure
IN Berzofsky, Jay A.; Feinstone, Stephen; Shirai, Mutsunori
PA United States Dept. of Health and Human Services, USA
SO PCT Int. Appl., 60 pp.
CODEN: PIXXD2
PI WO 9527733 A1 951019
DS W: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, JP, KE, KG, KP, KR, KZ, LK, LR, LT, LU, LV, MD, MG, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SI, SK, TJ, TT, UA, US, UZ
RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, DE, DK, ES, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG
AI WO 95-US3935 950407
PRAI US 94-224973 940408
DT Patent
LA English
AB Peptides representing portions of the Hepatitis C Virus core protein that represent cytotoxic T lymphocyte epitopes are disclosed. The peptides also have amino acid sequences corresponding to binding motifs for human HLA mols. The peptides are useful as vaccines for the prevention or treatment of Hepatitis C Virus infection and can also be used as reagents for diagnostic tests for Hepatitis C Virus exposure or for prognostic tests for predicting the clin. course of

Hepatitis C Virus infection.

IT **156649-16-0 160214-03-9 160926-86-3**
172784-71-3 172784-83-7
RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(hepatitis C virus core peptides for stimulation of cytotoxic T lymphocytes and diagnosis of HCV exposure)

L35 ANSWER 9 OF 20 CA COPYRIGHT 1998 ACS DUPLICATE 8
AN 124:7073 CA
TI Hepatitis C virus (HCV)-derived peptides for inducing cytotoxic T lymphocyte (CTL) against HCV
IN Chisari, Francis V.; Cerny, Andreas
PA Scripps Research Institute, USA
SO PCT Int. Appl., 86 pp.
CODEN: PIXXD2
PI WO 9525122 A1 950921
DS W: CA, JP, MX
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE
AI WO 95-US3224 950316
PRAI US 94-214650 940317
DT Patent
LA English
AB Peptides derived from various regions of the HCV genome are provided to boost the cellular immune system to fight or prevent HCV hepatitis. A total of 53 HCV-1-derived peptides were tested for capability to induce HCV-specific responses. The peptides of interest are ADLMGYIPLV (Core131-140), LLALLSCLTV (Core178-187), QLRRHIDLLV (E257-266), LLCPAGHAV (NS31169-1177), KLVALGINAV (NS31406-1415), SLMAFTAAV (NS41789-1797), LLFNILGGWV (NS41807-1816), and ILDSFDPLV (NS52252-2260). Such mols. are used for the treatment and prevention of acute or chronic HCV hepatitis; suitable pharmaceutical compns. and methods using such compns. are disclosed.

IT **160214-03-9 160215-51-0 160926-86-3**
160926-88-5 160926-89-6 160926-90-9
171105-25-2 171105-40-1
RL: BSU (Biological study, unclassified); BUU (Biological use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(peptide derived from hepatitis C virus; assessment of hepatitis C virus-derived peptides for capability of inducing cytotoxic T lymphocyte against HCV)

L35 ANSWER 10 OF 20 CA COPYRIGHT 1998 ACS DUPLICATE 9
AN 123:283629 CA
TI Compositions and methods for eliciting cytotoxic T lymphocyte immunity
IN Vitiello, Maria A.; Chesnut, Robert W.; Sette, Alessandro D.; Celis, Esteban; Grey, Howard

PA Cytel Corp., USA
SO PCT Int. Appl., 108 pp.
CODEN: PIXXD2
PI WO 9522317 A1 950824
DS W: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, JP, KE, KG, KP, KR, KZ, LK, LR, LT, LU, LV, MD, MG, MN, MW, MX, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SI, SK, TJ, TT, UA, UG
RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, DE, DK, ES, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG
AI WO 95-US2121 950216
PRAI US 94-197484 940216
DT Patent
LA English
AB Cytotoxic T lymphocyte (CTL) responses are effectively induced to an antigen of interest, particularly viral, bacterial, parasitic and tumor antigens. Compns., including pharmaceutical compns., of CTL-inducing peptide and an adjuvant or a lipidated peptide which induces a helper T cell (HTL) response stimulate the antigen specific CTL response. Among the viral antigens to which the CTL responses are effectively induced in humans are those of hepatitis B (HBV). The CTL response may be optimized by a regimen of two or more booster administrations, and cocktails of two or more CTL inducing peptides are employed to optimize epitope and/or MHC class I restricted coverage. In example, HLA-A2.1-restricted CTL was induced by s.c. priming with purified HBV peptides in incomplete Freund's adjuvant, combination of CTL and T-helper epitopes were used to induce CTL, and specific CTL inducing peptides were used as vaccines for preventing and treating hepatitis C virus infection, melanoma, human papillomavirus infection, and HIV infection.
IT **160213-98-9 160214-03-9 160215-51-0**
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(cytotoxic T lymphocyte and T helper cell epitope peptides as antigen-specific vaccine for preventing and treating bacterial or viral or parasitic infection and cancer)

L35 ANSWER 11 OF 20 CA COPYRIGHT 1998 ACS DUPLICATE 10
AN 123:141721 CA
TI Immunodominant human T-cell epitopes of hepatitis C virus
IN Leroux-Roels, Geert; Deleys, Robert; Maertens, Geert
PA Innogenetics N.V., Belg.
SO PCT Int. Appl., 104 pp.
CODEN: PIXXD2
PI WO 9512677 A2 950511
DS W: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, JP, KE, KG, KP, KR, KZ, LK, LR, LT, LU, LV, MD, MG, MN, MW, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SI, SK, TJ, TT, UA, US, UZ
RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, DE, DK, ES, FR, GA, GB, GR,

IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG
AI WO 94-EP3555 941028
PRAI EP 93-402718 931104
DT Patent
LA English
OS MARPAT 123:141721
AB Immunodominant hepatitis C virus (HCV) T-cell epitopes useful in hepatitis C prophylactic and therapeutic vaccines, derived from the HCV core, E1, E2, and NS3 proteins, are provided. These HCV T-cell epitopes may be used to prep. recombinant polypeptides contg. T helper cell (CD4+) epitopes and/or CTL (CD8+) epitopes and used as prophylactics or therapeutics.
IT **166673-27-4**
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(T-cell stimulating epitope of E1 region of hepatitis C virus; vaccines as prophylactics or therapeutics contg.)
IT **160926-89-6**
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(T-cell stimulating epitope of NS3 region of hepatitis C virus; vaccines as prophylactics or therapeutics contg.)
IT **166673-16-1 166673-20-7**
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(T-cell stimulating epitope of core region of hepatitis C virus; vaccines as prophylactics or therapeutics contg.)

L35 ANSWER 12 OF 20 CA COPYRIGHT 1998 ACS DUPLICATE 11
AN 123:31226 CA
TI Peptides derived from the hepatitis B virus DNA polymerase that induce a cytotoxic T lymphocyte response to the virus
IN Chisari, Francis V.
PA Scripps Research Institute, USA
SO PCT Int. Appl., 84 pp.
CODEN: PIXXD2
PI WO 9503777 A1 950209
DS W: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, ES, FI, GB, GE, HU, JP, KE, KG, KP, KR, KZ, LK, LT, LU, LV, MD, MG, MN, MW, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SI, SK, TJ, TT, UA, US, UZ, VN
RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, DE, DK, ES, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG
AI WO 94-US8685 940801
PRAI US 93-100870 930802
DT Patent
LA English
AB Peptides are used to define epitopes that stimulate HLA-restricted cytotoxic T lymphocyte activity against hepatitis B virus antigens. The peptides are derived from regions of HBV DNA polymerase, and are particularly useful in treating or preventing HBV infection, including methods for stimulating the immune response of chronically

infected individuals to respond to HBV antigens.

IT **160926-89-6**
RL: BAC (Biological activity or effector, except adverse); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(amino acid sequence; peptides derived from hepatitis B virus DNA polymerase that induce cytotoxic T lymphocyte response to virus)

L35 ANSWER 13 OF 20 CA COPYRIGHT 1998 ACS DUPLICATE 12
AN 122:211604 CA
TI Patients with chronic hepatitis C have circulating cytotoxic T cells which recognize hepatitis C virus-encoded peptides binding to HLA-A2.1 molecules
AU Battegay, Manuel; Fikes, John; Di Bisceglie, Adrian M.; Wentworth, Peggy A.; Sette, Alessandro; Celis, Esteban; Ching, Wei-Mei; Grakoui, Arash; Rice, Charles; et al.
CS Liver Diseases Section, National Institute Diabetes Digestive Kidney Diseases, Bethesda, MD, USA
SO J. Virol. (1995), 69(4), 2462-70
CODEN: JOVIAM; ISSN: 0022-538X
DT Journal
LA English
AB Antiviral cytotoxic T lymphocytes (CTL) may play a role in clearance of hepatitis C virus (HCV)-infected cells and thereby cause hepatocellular injury during acute and chronic HCV infection. The aim of this study was to identify HLA-A2.1-restricted HCV T-cell epitopes and to evaluate whether anti-HCV-specific CTL are present during chronic hepatitis C. Peripheral blood mononuclear cells from four HLA-A2-pos. patients with chronic hepatitis C and from two individuals after recovery from HCV infection were tested against a panel of HCV-encoded peptides derived from different regions of the genome, including some peptides contg. HLA-A2.1 binding motifs. HLA-A2-neg. patients with chronic hepatitis C as well as healthy HLA-A2-pos. (anti-HCV-neg.) donors served as controls. Peripheral blood mononuclear cells stimulated repeatedly with several HCV-encoded peptides (three in core, one in NS4B, and one in NS5B) yielded cytolytic responses. All four HLA-A2-pos. patients with active infection had CTL specific for at least one of the identified epitopes, whereas two patients who had recovered from HCV infection had almost no CTL responses. Monoclonal antibody blocking expts. performed for two epitopes demonstrated a class I- and HLA-A2-restricted CTL response. CTL epitopes could partially be predicted by HLA-A2 binding motifs and more reliably by quant. HLA-A2.1 mol. binding assays. Most of the identified epitopes could also be produced via the endogenous pathway. Specific CTL against multiple, mostly highly conserved epitopes of HCV were detected during chronic HCV infection. This finding may be important for further investigations of the immunopathogenesis of HCV, the development of potential therapies against HCV on the basis of

induction or enhancement of cellular immunity, and the design of vaccines.

IT **160213-98-9 160214-03-9 160215-51-0**
RL: BAC (Biological activity or effector, except adverse); PRP (Properties); BIOL (Biological study)
(as HLA-A2.1-restricted epitope for cytotoxic T-cells in humans with chronic hepatitis C)

L35 ANSWER 14 OF 20 CA COPYRIGHT 1998 ACS DUPLICATE 13
AN 122:130526 CA
TI Cytotoxic T lymphocyte response to hepatitis C virus-derived peptides containing the HLA A2.1 binding motif
AU Cerny, Andreas; McHutchison, John G.; Pasquinelli, Claudio; Brown, Michael E.; Brothers, Mary A.; Grabscheid, Benno; Fowler, Patricia; Houghton, Michael; Chisari, Francis V.
CS Scripps Res. Inst., La Jolla, CA, 92037, USA
SO J. Clin. Invest. (1995), 95(2), 521-30
CODEN: JCINAO; ISSN: 0021-9738
DT Journal
LA English
AB The HLA class I-restricted cytotoxic T lymphocyte (CTL) response is a major defense mechanism in viral infections. It has been suggested that the CTL response may contribute to viral clearance and liver cell injury during hepatitis C virus (HCV) infection. To test this hypothesis requires an understanding of the characteristics of HCV-specific cytotoxic effector cells and identification of the target antigens to which they respond. To begin this process we stimulated peripheral blood mononuclear cells (PBMC) from a group of HLA-A2 pos. patients with chronic hepatitis C with a panel of 130 HCV-derived peptides contg. the HLA-A2 binding motif. Effector cells were tested for their capacity to lyse HLA-A2-matched target cells that were either sensitized with peptide or infected with a vaccinia virus construct contg. HCV sequences. Using this approach we have identified nine immunogenic peptides in HCV, three of which are derived from the putative core protein, three from the nonstructural (NS) 3 domain, two from NS4 and one from NS5. Selected responses were shown to be HLA-A2 restricted, mediated by CD8+ T cells and to recognize endogenously synthesized viral antigen. Unexpectedly, peptide-specific CTL responses could also be induced in sero-neg. individuals, suggesting in vitro activation of naive CTL precursors. The precursor frequency of peptide-specific CTL was 10 to 100-fold higher in infected patients compared to uninfected controls, and the responses were greatly diminished by removal of CD45 RO+ (memory) T cells. Further quant. studies are clearly required to establish whether a correlation exists between the HCV-specific CTL response and the clin. course of this disease. Definition of the mol. targets of the human CTL response to HCV creates this opportunity, and may also contribute to the development of a T cell-based HCV vaccine.

Searcher : Shears 308-4994

IT **160213-98-9 160215-51-0 160926-86-3**
160926-88-5 160926-89-6 160926-90-9
160926-91-0
RL: BAC (Biological activity or effector, except adverse); BIOL (Biological study)
(cytotoxic T lymphocyte response to hepatitis C virus-derived peptides contg. the HLA A2.1 binding motif)

L35 ANSWER 15 OF 20 CA COPYRIGHT 1998 ACS DUPLICATE 14
AN 122:288372 CA
TI Identification of immunodominant epitopes in the core and non-structural region of hepatitis C virus by enzyme immunoassay using synthetic peptides
AU Park, Hae Joon; Byun, Si Myung; Ha, Young Ju; Ahn, Jong Seong; Moon, Hong Mo
CS Dep. Life Sci., Korea Advanced Inst. Sci. Technology, Kusung-dong, 373-1, S. Korea
SO J. Immunoassay (1995), 16(2), 167-81
CODEN: JOUIDK; ISSN: 0197-1522
DT Journal
LA English
AB Thirty-two synthetic peptides, components of the core and non-structural protein of Hepatitis C virus (HCV), were tested for their reactivities against antibodies in sera of healthy, HCV antibody pos. or chronic liver disease patients. Among them, 8 of the core peptides, 4 of the NS4 peptides and 3 of the NS5 peptides reacted with the HCV infected sera. In particular, C22 (core peptide) and NS4-1924 (NS4 peptide) were most reactive with the serum samples giving a pos. signal with com. available ELISA (ELISA) kit. Our results indicate that the immunodominant regions of the HCV-derived proteins are located at three regions in the core protein, three regions in the NS4 protein, and one region in the NS5 protein. These results indicate that the selected peptides are useful antigens in detecting antibodies in the sera from individuals infected with HCV.
IT **162937-00-0**
RL: BAC (Biological activity or effector, except adverse); BOC (Biological occurrence); PRP (Properties); BIOL (Biological study); OCCU (Occurrence)
(identification of immunodominant epitopes in core and nonstructural proteins of hepatitis C virus using synthetic peptides)

L35 ANSWER 16 OF 20 CA COPYRIGHT 1998 ACS DUPLICATE 15
AN 122:263516 CA
TI HLA-A2.1 binding peptides and their detection and uses
IN Grey, Howard M.; Sette, Alessandro; Sidney, John; Kast, W. Martin
PA Cytel Corp., USA
SO PCT Int. Appl., 138 pp.

CODEN: PIXXD2
PI WO 9420127 A1 940915
DS W: AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, ES, FI, GB, HU, JP, KP, KR, KZ, LK, LU, LV, MG, MN, MW, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SI, SK, UA, UZ, VN
RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, DE, DK, ES, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG
AI WO 94-US2353 940304
PRAI US 93-27146 930305
US 93-73205 930604
US 93-159184 931129
DT Patent
LA English
AB An algorithm for selecting immunogenic oligopeptides capable of specifically binding glycoproteins encoded by HLA-A2.1 allele and inducing T cell activation in T cells restricted by the A2.1 allele. The peptides are useful to elicit an immune response against a target antigen. Identification of immunogenic oligopeptides from viral or tumor-related proteins was demonstrated.
IT **160213-98-9 160214-03-9 160215-51-0**
RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(HLA-A2.1-binding immunogenic peptide and algorithm for its identification)

L35 ANSWER 17 OF 20 CA COPYRIGHT 1998 ACS DUPLICATE 16
AN 121:77905 CA
TI An epitope in hepatitis C virus core region recognized by cytotoxic T cells in mice and humans
AU Shiral, Mutsunori; Okada, Hiroshi; Nishioka, Mikio; Akatsuka, Toshitaka; Wychowski, Czeslaw; Houghten, Richard; Pendleton, C. David; Feinstone, Stephen M.; Berzofsky, Jay A.
CS Third Dep. Int. Med., Kagawa Med. Sch., Kagawa, 761-07, Japan
SO J. Virol. (1994), 68(5), 3334-42
CODEN: JOVIAM; ISSN: 0022-538X
DT Journal
LA English
AB Several cytotoxic T-lymphocyte (CTL) epitopes have been defined in hepatitis C virus (HCV) proteins. CTL may play an important role in the control of infection by HCV. Here, the authors identify a highly conserved antigenic site in the HCV core recognized by both murine and human CTL. Spleen cells from mice immunized with a recombinant vaccinia virus expressing the HCV core gene were restimulated in vitro with 11 peptides from the core protein. CTL from H-2d mice responded to a single 16-residue synthetic peptide (HCV 129-144). This conserved epitope was presented by a murine class I major histocompatibility mol. (H-2Dd) to conventional CD4- CD8+ CTL mapped by using transfectants expressing Dd, Ld, or Kd, but was not seen by CTL restricted by H-2b. The murine epitope was

mapped to the decapeptide LMGYIPLVGA. The same 16-residue peptide was recognized by CTL from two HCV-seropos. patients but not by CTL from any seroneg. donors. CTL from two HLA-A2-pos. patients with acute and chronic hepatitis C recognized a 9-residue fragment (DLMGYIPLV) of the peptide presented by HLA-A2 and contg. an HLA-A2-binding motif, extending only 1 residue beyond the murine epitope. Therefore, this conserved peptide, seen with murine CTL and human CTL with a very prevalent HLA class I mol., may be a valuable component of an HCV vaccine against a broad range of HCV isolates. This study demonstrates that the screening for CTL epitopes in mice prior to human study may be useful.

IT **156649-16-0**, Core protein (129-144) (hepatitis C virus)
RL: BIOL (Biological study)
(as epitope recognized by both mouse and human cytotoxic T cells)

L35 ANSWER 18 OF 20 CA COPYRIGHT 1998 ACS DUPLICATE 17
AN 120:28873 CA
TI HLA B44-restricted cytotoxic T lymphocytes recognizing an epitope on hepatitis C virus nucleocapsid protein
AU Kita, Hiroto; Moriyama, Takashi; Kaneko, Takashi; Harase, Ichiro; Nomura, Masayuki; Miura, Hideaki; Nakamura, Ikuo; Yazaki, Yoshio; Imawari, Michio
CS Fac. Med., Univ. Tokyo, Tokyo, 113, Japan
SO Hepatology (St. Louis) (1993), (5), 1039-44
CODEN: HPTLD9; ISSN: 0270-9139
DT Journal
LA English
AB Cytotoxic T lymphocytes have been reported to be involved in the immune clearance of virus-infected cells and in the pathogenesis of viral infection. The authors studied the cytotoxic T lymphocyte response to the putative nucleocapsid protein of hepatitis C virus in patients with chronic hepatitis C. Cytotoxic T lymphocytes specific for hepatitis C virus nucleocapsid protein were generated from peripheral blood lymphocytes by repeated stimulation with a synthetic hepatitis C virus nucleocapsid protein peptide. The cytotoxic T lymphocytes were CD8 pos. and recognized an epitope in hepatitis C virus nucleocapsid protein residues 81-100 in assocn. with a human leukocyte antigen class I mol, B44. The peptide-induced cytotoxic T lymphocytes recognized target cells synthesizing hepatitis C virus nucleocapsid protein endogenously, though less efficiently than peptide-pulsed target cells. The human leukocyte antigen B44-restricted cytotoxic T lymphocyte response was obsd. in 3 of 5 patients with chronic hepatitis C and a human leukocyte antigen B44 mol. but in neither of 2 hepatitis C virus-neg. healthy individuals with human leukocyte antigen B44 mols. The results demonstrate the presence of hepatitis C virus-specific cytotoxic T lymphocytes in the peripheral blood of patients with chronic hepatitis C and provide a strategy to study the role of cytotoxic T lymphocytes in the viral clearance and the

ADLMGYI

pathogenesis of hepatitis C virus infection.

IT **151935-57-8 151935-58-9**
RL: BIOL (Biological study)
(cytotoxic T-cells recognition of, of hepatitis C virus nucleocapsid protein, HLA-B44 antigen-restricted)

L35 ANSWER 19 OF 20 CA COPYRIGHT 1998 ACS DUPLICATE 18
AN 118:231780 CA
TI Interaction of immune sera with synthetic peptides corresponding to the structural protein region of hepatitis C virus
AU Ching, Wei Mei; Wychowski, Czeslow; Beach, Michael J.; Wang, Hui; Davies, Christine L.; Carl, Mitch; Bradley, Daniel W.; Alter, Harvey J.; Feinstone, Stephen M.; Shih, J. Wai Kuo
CS Nav. Med. Res. Inst., Bethesda, MD, 20889, USA
SO Proc. Natl. Acad. Sci. U. S. A. (1992), 89(8), 3190-4
CODEN: PNASA6; ISSN: 0027-8424
DT Journal
LA English
AB Comparison of the deduced amino acid sequence from the structural region of the Hutchinson strain of hepatitis C virus (HCV-H) with 4 other HCV isolates clearly divides the 5 isolates into 2 groups based on sequence homol. The first group includes HCV-H, HCV-1, and HC-J1, while the second includes HCV-J1 and HC-J4. Among the 5 isolates the first 190 residues (putative nucleocapsid) are highly conserved whereas residues 196-513 exhibit significant diversity and include a hypervariable region encompassing residues 386-404. A series of overlapping decapeptides were synthesized by solid-phase pin technol. according to sequence from HCV-H (amino acids 1-513), HC-J4 (amino acids 181-513), and regions from the 3 other isolates which exhibited sequence variation. A modified ELISA was used to measure immunoreactivity of sera from clin. posttransfusion cases and exptl. infected chimpanzees. Comparison of pre- and postinfection samples revealed 16 clusters of immunoreactive peptides within the structural region, none of which was found in the hypervariable region. Only one cluster (amino acids 73-89) was recognized by all human and chimpanzee sera. Clear variation in the immune response was obsd. between individuals, although no obvious difference in reactivity between acute and chronic cases was obsd. Within individual profiles, the reactivity to each peptide cluster and the total no. of reactive clusters increased over time.
IT **143246-51-9**
RL: BIOL (Biological study)
(as epitope of hepatitis C virus HCV-H strain, human immune sera reactivity with)

L35 ANSWER 20 OF 20 CA COPYRIGHT 1998 ACS DUPLICATE 19
AN 117:210280 CA
TI Immunodominant regions within the hepatitis C virus core and putative matrix proteins

AU Saellberg, Matti; Ruden, Ulla; Wahren, Britta; Magnius, Lars O.
CS Dep. Virol., Natl. Bacteriol. Lab., Stockholm, S-105 21, Swed.
SO J. Clin. Microbiol. (1992), 30(8), 1989-94
CODEN: JCMIDW; ISSN: 0095-1137
DT Journal
LA English
AB The complete amino acid sequences of hepatitis C virus (HCV) core (residues 1-115) and putative matrix (residues 116-190) proteins were synthesized as 18-residue-long peptides with an 8-amino-acid overlap. The peptides were assayed with human serum samples with antibodies to HCV (anti-HCV) and serum samples without anti-HCV, as detd. by several com. assays. Immunodominant regions were defined within residues 1-18, 11-28, 21-38, 51-68, and 101-118. The peptides that covered these regions were recognized by 40 of 50 (80%), 42 of 50 (84%), 36 of 50 (72%), 34 of 48 (68%), and 36 of 48 (72%) of the anti-HCV pos. serum samples, resp. Two anti-HCV neg. serum samples were each repeatedly reactive with one peptide, but both were found to be neg. by confirmatory anti-HCV assays. Four serum samples that were confirmed to be pos. for anti-HCV in com. assays did not recognize any of the peptides that cover the HCV core-matrix regions. Ninety-two percent of anti-HCV-pos. serum samples reacted with a combination of peptides covering residues 1-18 and 11-28. Testing of peptides that contain the reported genotypic variations of the HCV core within the regions at residues 1-18, 51-68, and 101-118 showed that a change from Thr-110 to Asn-110 decreased the reactivities of 8 serum samples. Thus, human antibodies to the HCV core-matrix protein(s) are mainly directed to linear determinants and can easily be reproduced by using short synthetic peptides. Also, such antibodies develop in >90% of HCV-infected people.
IT **144279-72-1**
RL: BIOL (Biological study)
(of core-matrix protein of hepatitis C virus, antibody response in humans to)

L35 WAS CREATED DURING MULTIFILE PROCESSING AND CANNOT BE USED WHEN CREATING E#S
Enter SET SMARTSELECT ON before using SELECT to create an L-number of terms extracted from an L-number that contains answers or terms from more than one file. SET SMARTSELECT ON must be entered before you execute the SELECT command.

=> fil reg; d l33 1-21 .bevreg1; fil hom

FILE 'REGISTRY' ENTERED AT 15:59:53 ON 14 JAN 1998

Searcher : Shears 308-4994

STRUCTURE FILE UPDATES: 11 JAN 98 HIGHEST RN 199655-18-0
DICTIONARY FILE UPDATES: 13 JAN 98 HIGHEST RN 199655-18-0

TSCA INFORMATION NOW CURRENT THROUGH JUNE 1997

Please note that search-term pricing does apply when conducting SmartSELECT searches.

L33 ANSWER 1 OF 21 REGISTRY COPYRIGHT 1998 ACS
RN 172784-83-7 REGISTRY
CN L-Proline, L-seryl-L-phenylalanyl-L-seryl-L-isoleucyl-L-phenylalanyl-L-leucyl-L-leucyl-L-alanyl-L-leucyl-L-leucyl-L-seryl-L-cysteinyl-L-leucyl-L-threonyl-L-valyl- (9CI) (CA INDEX NAME)
SQL **16**

SEQ 1 SFSIFLLALL SCLTVP
=====
HITS AT: 6-15

L33 ANSWER 2 OF 21 REGISTRY COPYRIGHT 1998 ACS
RN 172784-71-3 REGISTRY
CN Glycine, N-[N-[N-[1-[N-[N-[N-[N-(N-L-.alpha.-aspartyl-L-leucyl)-L-methionyl]glycyl]-L-tyrosyl]-L-isoleucyl]-L-prolyl]-L-leucyl]-L-valyl]- (9CI) (CA INDEX NAME)
SQL **10**

SEQ 1 DLMGYIPLVG
=========
HITS AT: 1-9

L33 ANSWER 3 OF 21 REGISTRY COPYRIGHT 1998 ACS
RN 171105-40-1 REGISTRY
CN L-Valine, N-[N-[N-[N-[N-[1-[N-[N-(N-L-prolyl-L-leucyl)-L-leucyl]-L-cysteinyl]-L-prolyl]-L-alanyl]glycyl]-L-histidyl]-L-alanyl]- (9CI) (CA INDEX NAME)
SQL **10**

SEQ 1 PLLCPAGHAV
=========
HITS AT: 2-10

L33 ANSWER 4 OF 21 REGISTRY COPYRIGHT 1998 ACS
RN 171105-25-2 REGISTRY
CN L-Valine, L-glutaminyl-L-leucyl-L-arginyl-L-arginyl-L-histidyl-L-isoleucyl-L-.alpha.-aspartyl-L-leucyl-L-leucyl- (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:
CN L-Valine, N-[N-[N-[N-[N-[N-[N2-[N2-(N-L-glutaminyl-L-leucyl)-L-arginyl]-L-arginyl]-L-histidyl]-L-isoleucyl]-L-.alpha.-aspartyl]-L-leucyl]-L-leucyl]-
SQL **10**

SEQ 1 QLRRHIDLLV
==========
HITS AT: 1-10

L33 ANSWER 5 OF 21 REGISTRY COPYRIGHT 1998 ACS
RN 166673-27-4 REGISTRY
CN L-Cysteine, L-leucyl-L-prolyl-L-alanyl-L-threonyl-L-glutaminyl-L-leucyl-L-arginyl-L-arginyl-L-histidyl-L-isoleucyl-L-.alpha.-aspartyl-L-leucyl-L-leucyl-L-valylglycyl-L-seryl-L-alanyl-L-threonyl-L-leucyl- (9CI) (CA INDEX NAME)
SQL **20**

SEQ 1 LPATQLRRHI DLLVGSATLC
====== ====
HITS AT: 5-14

L33 ANSWER 6 OF 21 REGISTRY COPYRIGHT 1998 ACS
RN 166673-20-7 REGISTRY
CN L-Proline, L-leucyl-L-prolylglycyl-L-cysteinyl-L-seryl-L-phenylalanyl-L-seryl-L-isoleucyl-L-phenylalanyl-L-leucyl-L-leucyl-L-alanyl-L-leucyl-L-leucyl-L-seryl-L-cysteinyl-L-leucyl-L-threonyl-L-valyl- (9CI) (CA INDEX NAME)
SQL **20**

SEQ 1 LPGCSFSIFL LALLSCLTVP
= =========
HITS AT: 10-19

L33 ANSWER 7 OF 21 REGISTRY COPYRIGHT 1998 ACS
RN 166673-16-1 REGISTRY
CN L-Valine, L-lysyl-L-valyl-L-isoleucyl-L-.alpha.-aspartyl-L-threonyl-L-leucyl-L-threonyl-L-cysteinylglycyl-L-phenylalanyl-L-alanyl-L-.alpha.-aspartyl-L-leucyl-L-methionylglycyl-L-tyrosyl-L-isoleucyl-L-prolyl-L-leucyl- (9CI) (CA INDEX NAME)
SQL **20**

SEQ 1 KVIDTLTCGF ADLMGYIPLV
==========
HITS AT: 11-20

L33 ANSWER 8 OF 21 REGISTRY COPYRIGHT 1998 ACS
RN 162937-00-0 REGISTRY
CN L-Alanine, N-[N-[N-[N-[1-[N-[N-[N-[N-(N-L-.alpha.-aspartyl-L-leucyl)-

L-methionyl]glycyl]-L-tyrosyl]-L-isoleucyl]-L-prolyl]-L-leucyl]-L-valyl]glycyl]- (9CI) (CA INDEX NAME)
SQL **11**

SEQ 1 DLMGYIPLVG A
=========
HITS AT: 1-9

L33 ANSWER 9 OF 21 REGISTRY COPYRIGHT 1998 ACS
RN 160926-91-0 REGISTRY
CN L-Valine, N-[N-[1-[N-[N-[N-[N-(N-L-isoleucyl-L-leucyl)-L-.alpha.-aspartyl]-L-seryl]-L-phenylalanyl]-L-.alpha.-aspartyl]-L-prolyl]-L-leucyl]- (9CI) (CA INDEX NAME)
SQL **9**

SEQ 1 ILDSFDPLV
=========
HITS AT: 1-9

L33 ANSWER 10 OF 21 REGISTRY COPYRIGHT 1998 ACS
RN 160926-90-9 REGISTRY
CN L-Valine, L-seryl-L-leucyl-L-methionyl-L-alanyl-L-phenylalanyl-L-threonyl-L-alanyl-L-alanyl- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN L-Valine, N-[N-[N-[N-[N-[N-[N-(N-L-seryl-L-leucyl)-L-methionyl]-L-alanyl]-L-phenylalanyl]-L-threonyl]-L-alanyl]-L-alanyl]-
SQL **9**

SEQ 1 SLMAFTAAV
=========
HITS AT: 1-9

L33 ANSWER 11 OF 21 REGISTRY COPYRIGHT 1998 ACS
RN 160926-89-6 REGISTRY
CN L-Valine, L-lysyl-L-leucyl-L-valyl-L-alanyl-L-leucylglycyl-L-isoleucyl-L-asparaginyl-L-alanyl- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN L-Valine, N-[N-[N2-[N-[N-[N-[N-[N-(N-L-lysyl-L-leucyl)-L-valyl]-L-alanyl]-L-leucyl]glycyl]-L-isoleucyl]-L-asparaginyl]-L-alanyl]-
SQL **10**

SEQ 1 KLVALGINAV
==========
HITS AT: 1-10

L33 ANSWER 12 OF 21 REGISTRY COPYRIGHT 1998 ACS
RN 160926-88-5 REGISTRY
CN L-Valine, L-leucyl-L-leucyl-L-cysteinyl-L-prolyl-L-alanylglycyl-L-histidyl-L-alanyl- (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:
CN L-Valine, N-[N-[N-[N-[N-[1-[N-(N-L-leucyl-L-leucyl)-L-cysteinyl]-L-prolyl]-L-alanyl]glycyl]-L-histidyl]-L-alanyl]-
SQL **9**

SEQ 1 LLCPAGHAV
==========
HITS AT: 1-9

L33 ANSWER 13 OF 21 REGISTRY COPYRIGHT 1998 ACS
RN 160926-86-3 REGISTRY
CN L-Valine, L-alanyl-L-.alpha.-aspartyl-L-leucyl-L-methionylglycyl-L-tyrosyl-L-isoleucyl-L-prolyl-L-leucyl- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN L-Valine, N-[N-[1-[N-[N-[N-[N-[N-(N-L-alanyl-L-.alpha.-aspartyl)-L-leucyl]-L-methionyl]glycyl]-L-tyrosyl]-L-isoleucyl]-L-prolyl]-L-leucyl]-
SQL **10**

SEQ 1 ADLMGYIPLV
==========
HITS AT: 1-10

L33 ANSWER 14 OF 21 REGISTRY COPYRIGHT 1998 ACS
RN 160215-51-0 REGISTRY
CN L-Valine, N-[N-[N-[N-[N-[N-[N-[N-(N-L-leucyl-L-leucyl)-L-alanyl]-L-leucyl]-L-leucyl]-L-seryl]-L-cysteinyl]-L-leucyl]-L-threonyl]- (9CI) (CA INDEX NAME)
SQL **10**

SEQ 1 LLALLSCLTV
==========
HITS AT: 1-10

L33 ANSWER 15 OF 21 REGISTRY COPYRIGHT 1998 ACS
RN 160214-03-9 REGISTRY
CN L-Valine, N-[N-[1-[N-[N-[N-[N-(N-L-.alpha.-aspartyl-L-leucyl)-L-methionyl]glycyl]-L-tyrosyl]-L-isoleucyl]-L-prolyl]-L-leucyl]- (9CI) (CA INDEX NAME)
SQL **9**

SEQ 1 DLMGYIPLV
==========
HITS AT: 1-9

L33 ANSWER 16 OF 21 REGISTRY COPYRIGHT 1998 ACS
RN 160213-98-9 REGISTRY
CN L-Valine, L-leucyl-L-leucyl-L-phenylalanyl-L-asparaginyl-L-isoleucyl-L-leucylglycylglycyl-L-tryptophyl- (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:
CN L-Valine, N-[N-[N-[N-[N-[N-[N2-[N-(N-L-leucyl-L-leucyl)-L-phenylalanyl]-L-asparaginyl]-L-isoleucyl]-L-leucyl]glycyl]glycyl]-L-tryptophyl]-
SQL **10**

SEQ 1 LLFNILGGWV
==========
HITS AT: 1-10

L33 ANSWER 17 OF 21 REGISTRY COPYRIGHT 1998 ACS
RN 156649-16-0 REGISTRY
CN L-Leucine, glycyl-L-phenylalanyl-L-alanyl-L-.alpha.-aspartyl-L-leucyl-L-methionylglycyl-L-tyrosyl-L-isoleucyl-L-prolyl-L-leucyl-L-valylglycyl-L-alanyl-L-prolyl- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN Core protein(129-144) (hepatitis C virus)
SQL **16**

SEQ 1 GFADLMGYIP LVGAPL
======== ==
HITS AT: 3-12

L33 ANSWER 18 OF 21 REGISTRY COPYRIGHT 1998 ACS
RN 151935-58-9 REGISTRY
CN L-Alanine, L-alanyl-L-.alpha.-aspartyl-L-leucyl-L-methionylglycyl-L-tyrosyl-L-isoleucyl-L-prolyl-L-leucyl-L-valylglycyl-L-alanyl-L-prolyl-L-leucylglycylglycyl-L-alanyl-L-alanyl-L-arginyl- (9CI) (CA INDEX NAME)
SQL **20**

SEQ 1 ADLMGYIPLV GAPLGGAARA
==========
HITS AT: 1-10

L33 ANSWER 19 OF 21 REGISTRY COPYRIGHT 1998 ACS
RN 151935-57-8 REGISTRY
CN L-Valine, L-lysyl-L-valyl-L-isoleucyl-L-.alpha.-aspartyl-L-threonyl-L-phenylalanyl-L-threonyl-L-cysteinylglycyl-L-leucyl-L-alanyl-L-.alpha.-aspartyl-L-leucyl-L-methionylglycyl-L-tyrosyl-L-isoleucyl-L-prolyl-L-leucyl- (9CI) (CA INDEX NAME)
SQL **20**

SEQ 1 KVIDTFTCGL ADLMGYIPLV
==========
HITS AT: 11-20

L33 ANSWER 20 OF 21 REGISTRY COPYRIGHT 1998 ACS
RN 144279-72-1 REGISTRY

CN L-Alanine, L-alanyl-L-.alpha.-aspartyl-L-leucyl-L-methionylglycyl-L-tyrosyl-L-isoleucyl-L-prolyl-L-leucyl-L-valylglycyl-L-alanyl-L-prolyl-L-leucylglycylglycyl-L-alanyl- (9CI) (CA INDEX NAME)
SQL **18**

SEQ 1 ADLMGYIPLV GAPLGGAA
==========
HITS AT: 1-10

L33 ANSWER 21 OF 21 REGISTRY COPYRIGHT 1998 ACS
RN 143246-51-9 REGISTRY
CN Glycine, glycyl-L-phenylalanyl-L-alanyl-L-.alpha.-aspartyl-L-leucyl-L-methionylglycyl-L-tyrosyl-L-isoleucyl-L-prolyl-L-leucyl-L-valyl- (9CI) (CA INDEX NAME)
SQL **13**

SEQ 1 GFADLMGYIP LVG
======== ==
HITS AT: 3-12

FILE 'HOME' ENTERED AT 16:00:08 ON 14 JAN 1998